

## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for collecting sleep quality data, comprising:
  - sensing physiological information regarding at least one physiological condition related to sleep quality of a patient and indicative of patient sleep state;
  - sensing non-physiological information regarding at least one non-physiological condition that affects the sleep quality of the patient, the at least one non-physiological condition comprising an ambient condition external to the patient ~~other than time~~, the physiological information and the non-physiological information sensed contemporaneously by respective sensors;
  - storing the physiological information and the non-physiological information in an implantable device; and
  - evaluating the patient's sleep quality using both the physiological and non-physiological information by calculating a composite sleep quality metric as a function of the physiological and non-physiological information stored in the implantable device.
2. (Previously presented) The method of claim 1, wherein the composite sleep quality metric comprises a sleep disturbance index.
3. (Previously presented) The method of claim 1, wherein the at least one physiological condition comprises a respiratory system condition.
4. (Previously presented) The method of claim 1, wherein the at least one physiological condition comprises a muscle system condition.
5. (Previously presented) The method of claim 1, further comprising trending the composite sleep quality metric over time.

6. (Previously presented) The method of claim 1, wherein the non-physiological information comprises ambient temperature.
7. (Previously presented) The method of claim 1, wherein the at least one non-physiological condition comprises an environmental condition.
8. (Previously presented) The method of claim 1, wherein the at least one non-physiological condition comprises a contextual condition.
9. (Previously presented) The method of claim 1, wherein collecting the physiological information comprises collecting data associated with sleep stages.
10. (Previously presented) The method of claim 1, wherein collecting the physiological information comprises collecting data associated with sleep disruption.
11. (Previously presented) The method of claim 1, wherein collecting the physiological information comprises collecting data associated with disordered breathing.
12. (Previously presented) The method of claim 1, wherein collecting the physiological information comprises collecting data associated with a movement disorder.
13. (Canceled)
14. (Previously presented) The method of claim 1, wherein collecting the non-physiological information comprises sensing the at least one non-physiological condition external to the patient and transmitting the sensed non-physiological condition to the implantable device.
- 15-34. (Canceled)
35. (Currently amended) A method for assessing sleep quality of a patient, comprising:

sensing physiological information regarding at least one physiological condition related to sleep quality of a patient using an implantable device;  
sensing non-physiological information regarding at least one non-physiological condition that affects the sleep quality of the patient, the at least one non-physiological condition comprising an ambient condition external to the patient ~~other than time~~, the physiological information and the non-physiological information sensed contemporaneously by respective sensors; and  
evaluating the sleep quality of the patient using the physiological and non-physiological information by calculating a composite sleep quality metric as a function of the physiological and non-physiological information, wherein the evaluating the sleep quality is performed at least in part by the implantable device.

36. (Previously presented) The method of claim 35, wherein the non-physiological information comprises patient location information.

37. (Previously presented) The method of claim 35, wherein evaluating the sleep quality further comprises determining one or more sleep stages.

38. (Previously presented) The method of claim 35, wherein the physiological information is indicative of sleep disruption.

39. (Previously presented) The method of claim 35, wherein the composite sleep quality metric comprises a sleep disturbance index.

40. (Previously presented) The method of claim 35, wherein the non-physiological information comprises ambient temperature.

41. (Previously presented) The method of claim 35, wherein the non-physiological information is indicative of external air quality.

42. (Previously presented) The method of claim 35, wherein evaluating the sleep quality further comprises trending the composite sleep quality metric over time.

43. (Previously presented) The method of claim 35, wherein the physiological information is indicative of disordered breathing.

44. (Previously presented) The method of claim 35, wherein the physiological information is indicative of one or more movement disorders.

45. (Previously presented) The method of claim 35, wherein the non-physiological information is indicative of events that disrupt sleep.

46. (Previously presented) The method of claim 35, wherein sensing the non-physiological information comprises sensing the at least one non-physiological condition external to the patient and transmitting the sensed non-physiological condition to the implantable device.

47-96. (Canceled)